



The importance of sustainability in the context of health education

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ABSTRACT

Sustainability in health education is crucial for integrating educational practices with the promotion of sustainable public health. This concept is not restricted to the environment, but encompasses social, economic and ecological aspects, preparing professionals who are aware of the interrelationships between health and the environment. The inclusion of sustainable principles in curricula trains students to develop programs that promote sustainable health and well-being, which is essential for facing challenges such as climate change. Integrating sustainability into medical training is vital to prepare doctors who deal with environmental impacts on health and promote responsible practices.

Keywords: Sustainability, Health education, Public health, Educational practices, Environmental impacts.

INTRODUCTION

The importance of sustainability in the context of health education is a topic that is gaining more and more prominence, reflecting an urgent need to align educational practices with the promotion of sustainable public health. Sustainability in health education is not only an environmental issue, but also a holistic approach that integrates social, economic, and ecological aspects to ensure a healthy future for all.

Thus, the incorporation of sustainability principles in health education allows the training of professionals who are aware of the interrelations between health and the environment. Yang et al. (2010) highlight that sustainable health programs are key to ensuring continuity of care and building resilient infrastructures that meet the long-term needs of communities (YANG; FARMER; MCGAHAN, 2010).

Thus, integrating environmental sustainability into health education curricula can equip students with essential competencies to plan and implement educational programs that promote sustainable health and well-being (BAJRACHARYA, 2009). This is critical to meeting the challenges posed by climate change and other environmental pressures.

Ecological sustainability, according to Fleming et al. (2009), should be a central component in public health education, preparing universities to create environments that include ecologically sustainable practices and promote environmental health. In this vein, the need for systems thinking in sustainability education is emphasized by Chiu et al. (2022), who highlight the importance of an interdisciplinary

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approach to understanding the impact of chemicals on the environment and human health. This thinking is essential to promote healthy aging and quality of life.

Teherani et al. (2017) identified central objectives for sustainable health education, emphasizing that clinicians need to be prepared to address the health impacts of climate change and promote environmentally responsible health practices. Population health, on the other hand, depends fundamentally on environmental, social and economic conditions, and that sustainability should be a priority to ensure long-term health (MCMICHAEL, 2006).

Sustainable health education should be integrated into the medical curriculum, emphasizing prevention and the sustainability of health systems as essential components of medical education (Tun, 2019). Gandhi et al. (2020) suggested that integrating sustainability into postgraduate medical education is vital to empowering clinicians to translate sustainability theory into clinical practice, promoting planetary health.

Given this scenario, it is clear that sustainability training should encompass patient care, practical management, and leadership/commissioning, providing comprehensive training for new health professionals.

OBJECTIVE

The aim of this study is to describe in a narrative way the importance of sustainability in the context of health education.

METHODOLOGY

The methodology adopted to carry out this study was based on a literature review using the Virtual Health Library (VHL) and *Web of Science* databases. The search strategy applied to the databases included the terms "Sustainability OR Sustainability AND Education OR Education AND Health OR Health".

Data collection was carried out in March 2024, with no restrictions on the period of publication of the studies, in order not to limit the results. Original research articles, literature reviews, case studies, conference reports, and book chapters addressing the role of sustainability in the context of health education were considered in the review. The studies were described narratively throughout the text, highlighting the main findings.

DEVELOPMENT

The importance of sustainability in the context of health education is a topic of growing relevance, especially in the face of global environmental challenges that directly affect human health. It is understood



that sustainability education in healthcare aims to prepare health professionals to recognize and respond to the impacts of climate change and ecologically irresponsible practices, which harm ecosystems and contribute to global warming. The incorporation of sustainability principles in the training of these professionals is essential to mitigate the adverse health effects resulting from these changes (TEHERANI et al., 2017).

Thus, the integration of sustainability into the health education curriculum promotes a holistic understanding of the relationship between health and the environment. Studies show that the practice of a sustainable healthcare system not only improves quality of life but also contributes to disease prevention by reducing exposure to pollutants and other environmental threats (CHIU et al., 2022). Additionally, educating future professionals about sustainability helps develop a critical and proactive mindset regarding environmental challenges.

It is worth noting that educational programs that incorporate sustainability face several obstacles, such as the lack of curricular space and the need for teacher training. However, the benefits are wide-ranging, including preparing physicians to apply sustainability principles in their clinical practice, which can lead to significant improvements in public health (TUN, 2019). The inclusion of sustainability topics in medical education is vital to equipping professionals with the skills they need to meet the challenges of the future.

Sustainable health education, on the other hand, emphasizes prevention rather than delayed intervention, promoting environmental health and the sustainability of health systems. This is particularly relevant in the context of increasing demands on healthcare resources and pressures to maintain quality of care (GANDHI et al., 2020). Adopting sustainable practices can result in more efficient and resilient healthcare systems.

Studies highlight the need to develop a culture of sustainability in healthcare organizations, which requires specific managerial competencies and organizational change strategies. Implementing a corporate culture of sustainability can improve the management of the quality of care and respond effectively to constant changes in the healthcare environment (Ramirez et al., 2013). In addition, green leadership is crucial for promoting sustainable practices in the healthcare industry.

The benefits of education for sustainability extend beyond the health sector, also encompassing the emotional well-being and quality of life of children and young people. Promoting health and sustainability from childhood has long-term gains by encouraging healthy and sustainable behaviors that can reduce risk behaviors and promote health equity (MANNIX-MCNAMARA; SIMOVSKA, 2015).

In this context, collaboration between students and teachers becomes essential for the development of knowledge and skills in sustainable health. For Tun et al. (2020), students can bring new ideas and knowledge about the climate and ecological crisis, collaborating in the creation of new teaching materials



and educational activities. This partnership is critical for the effective integration of sustainability into the health curriculum.

Thus, sustainability in health education also includes the use of distance learning technologies, which can expand the reach and effectiveness of educational programs. Studies indicate that sustainable virtual education can systemically address the content components of learning, assessment, media, and strategies, preparing future clinicians to address sustainability issues affecting patient care (LEE et al., 2023).

In this sense, patients' personal responsibility for their own health is a crucial component of sustainable development in health. Peycheva (2017) points out that health education can increase patients' responsibility and promote lifestyle changes that prevent diseases. The active participation of patients is vital for the sustainability of health systems.

However, the need to integrate sustainability into university courses is highlighted by several studies, which point to the importance of developing generic and transferable professional skills in sustainability (PATRICK et al., 2016). The exchange and creation of knowledge in sustainable health are key to empowering health professionals to address contemporary environmental challenges.

Sustainable health education should also be seen as a global imperative, with international conferences and forums playing a crucial role in the production and dissemination of knowledge. However, the predominance of discourses from the Global North must be balanced with inclusive global perspectives that address historical and contemporary disparities in health (NAIDU; RAMANI, 2023). This inclusive approach is essential for the global legitimacy of health education.

In the meantime, it is necessary that the teaching of sustainability in health is transversal, permeating all areas of the curriculum and integrating with clinical practice. Sustainable health education should also be contextualized and relevant, using case studies and specific teaching materials that reflect local and global realities (WALPOLE et al., 2019). Sustainability in health education requires a continuous commitment to curriculum updating and innovation.

Thus, the creation of health sustainability networks, such as the Sustainable Health Education Network, is essential for the implementation of educational changes. These networks facilitate collaboration between academics, clinicians, and students, promoting the inclusion of sustainable learning objectives in national and international curricula (WALPOLE et al., 2019). Networking is essential for the dissemination of good practices and the advancement of sustainable health education.

Sustainable educational interventions can also increase the awareness and action of health professionals in relation to sustainability. Studies show that workshops and other educational interventions can significantly improve health professionals' perception of and engagement with environmental issues



(CHARLESWORTH et al., 2013). Thus, continuing education and professional development are essential for sustainability in healthcare.

Sustainability in health education involves implementing sustainable practices in specific clinical specialties, such as green nephrology, sustainable psychiatry, and sustainable primary care. These exemplary practices serve as models for other areas of healthcare, demonstrating how sustainability can be integrated into daily clinical practice (Walpole et al., 2019). The spread of these practices can accelerate the adoption of sustainable methods across the healthcare industry.

The formation of managerial competencies for sustainability is essential for the development of resilient and efficient health organizations. Empowering health managers to lead sustainable initiatives can result in significant improvements in the quality and accessibility of care (Ramirez et al., 2013). Sustainable leadership is a key component of health systems transformation.

FINAL THOUGHTS

At the conclusion of this study, it was found that sustainability in health education implies the incorporation of innovative pedagogical practices that directly address contemporary environmental and social challenges. It was understood that promoting health and well-being through sustainability is an approach that benefits both individuals and communities. Integrating sustainable practices into health education can lead to an overall improvement in public health by reducing disparities and promoting equity.

Given the context presented, it is evident that the development of evidence-based interventions and sustainable practices is a key factor for the long-term effectiveness of public health programs. In addition, the sustainability of interventions is a growing area of research, with the need for continuous adaptation to meet the needs of populations.

In conclusion, education for sustainability in the context of health is an urgent need and requires collaboration between educators, students, and health professionals. Integrating sustainable principles into education can transform health systems, improve the quality of care, and promote environmental and public health. Thus, sustainability in health education is not only a trend, but a necessity to ensure a healthy future for all generations.



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